

EA APPLICATION SUPPORTING REPORT

SAVANNAH GOLDFIELDS LTD

Appendix 19 Noise Assessment Review (SEG, 2025)



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Thursday, 19 June 2025

Savanah Goldfields Ltd
C/- Ardent Group Pty Ltd
3 Water Street
Red Hill, QLD 4059

Attn: Jacob Arnold

**Subject: Noise and Vibration Impact Assessment Review – Agate Creek
Ongoing Operations Project**

Dear Jacob,

Background

In 2023 SEG prepared an environmental noise and vibration assessment report for Laneway Resources Pty Ltd for the Agate Creek Expansion Project, 6 June 2023. It is understood that Laneway Resources (now Savannah Goldfields Limited (SVG)) have made minor amendments to the mine plan compared to the mine plan being the basis of our 2023 assessment report. The noise and vibration assessment report comprised an early phase of Pit 6 mining and consequently all plants were situated in an elevated position on the pre mining ground surface. This was a conservative noise model leading to elevated environmental noise levels. It is relevant to note that the 2023 noise model did not include any acoustic screening from works in the developing pit. The location of the original modelling case is shown in Figure 1.

The purpose of this correspondence is to compare, contrast and if possible assess the future noise emissions with the 2023 noise study.

A summary of the future work phases and the flow of waste between pits, waste dumps and backfilling pits comprises:

1. Mine Pit 1, All waste rock from Pit 1 goes to temporary Pit 1 stockpile.
2. Mine Pit 1 extension followed by Pit 2 and Pit 4. All rock waste from Pit 1 extension, Pit 2 and Pit 4 goes to Pit 1 backfill.
3. Cease mining and eliminate Pit 1 waste stockpile. Pit 1 waste stockpile goes to Pit 1, Pit 1 Extension, Pit 2 and Pit 4 backfills
4. Mine Pit 6 Extension. Waste rock from Pit 6 extension goes to temporary Pit 6 stockpile, then back into pit 6 backfill post mining.

It is evident that Phase 3 does not involve mining but involves eliminating the out of pit waste dump-backfilling Pit1, Pits 2 and 4. These four phases are shown in Figure 2. It is important to note there will not be any simultaneous mining and backfilling from temporary waste dumps. Backfilling is to be a separate process.

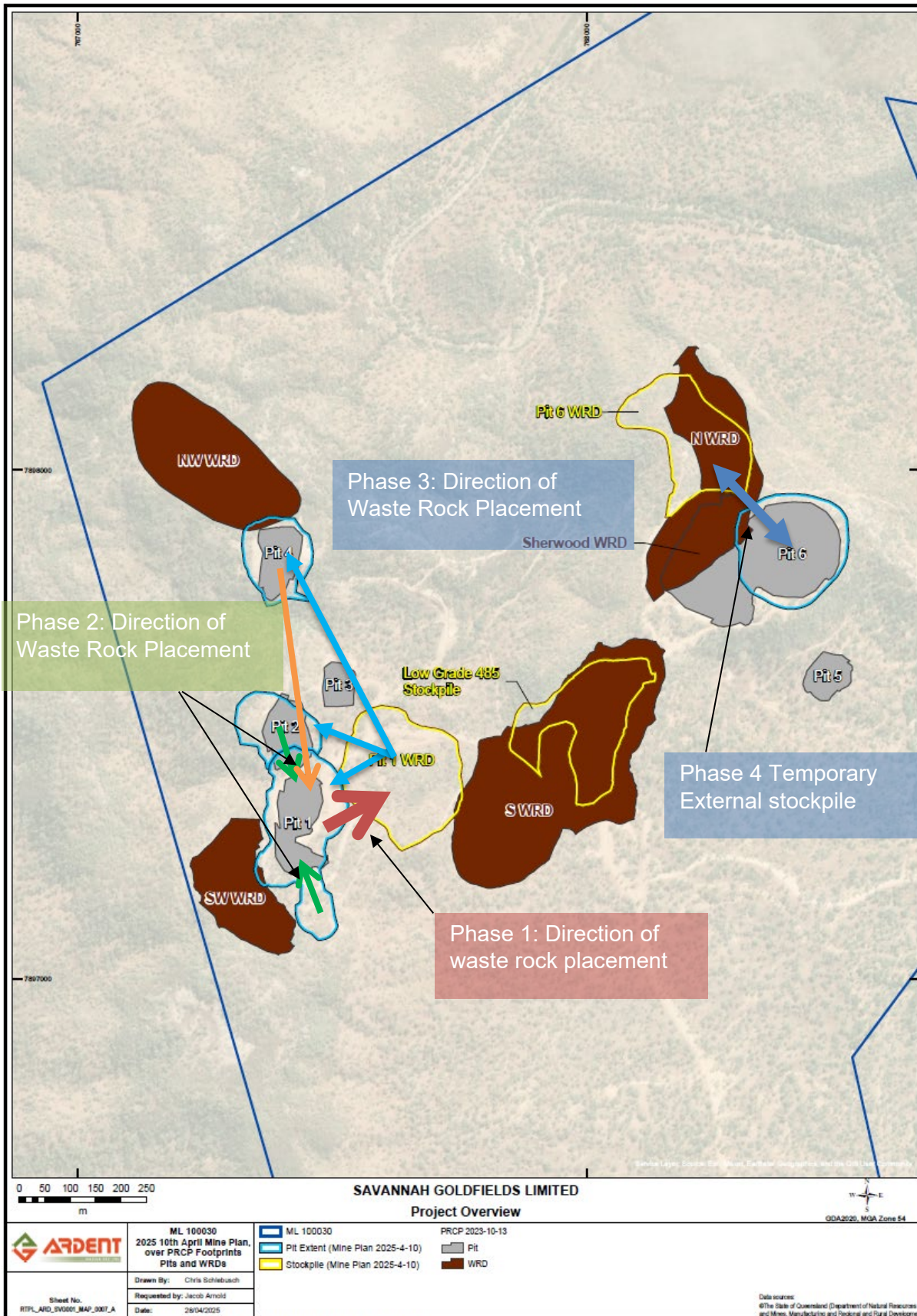


FIGURE 2: MINING FUTURE PHASES WASTE ROCK HANDLING

The distance between the various pits and the nearby sensitive receptors is shown in Table 1 and Figure 3.

TABLE 1: DISTANCE BETWEEN RECEPTORS AND PITS

Receptors / Pits	Distance in km between pits and receptors			
	Pit 6 Original	Pit 1	Pit 2	Pit 4
Homestead 01	8	9.5	9.3	9.3
Campground	1.5	2.1	2.2	2.3
Old Campground	11	11	11	11
Rungulla Resource Reserve	1.4	0.5	0.5	0.6
Rungulla National Park	4	3	3.1	3.3

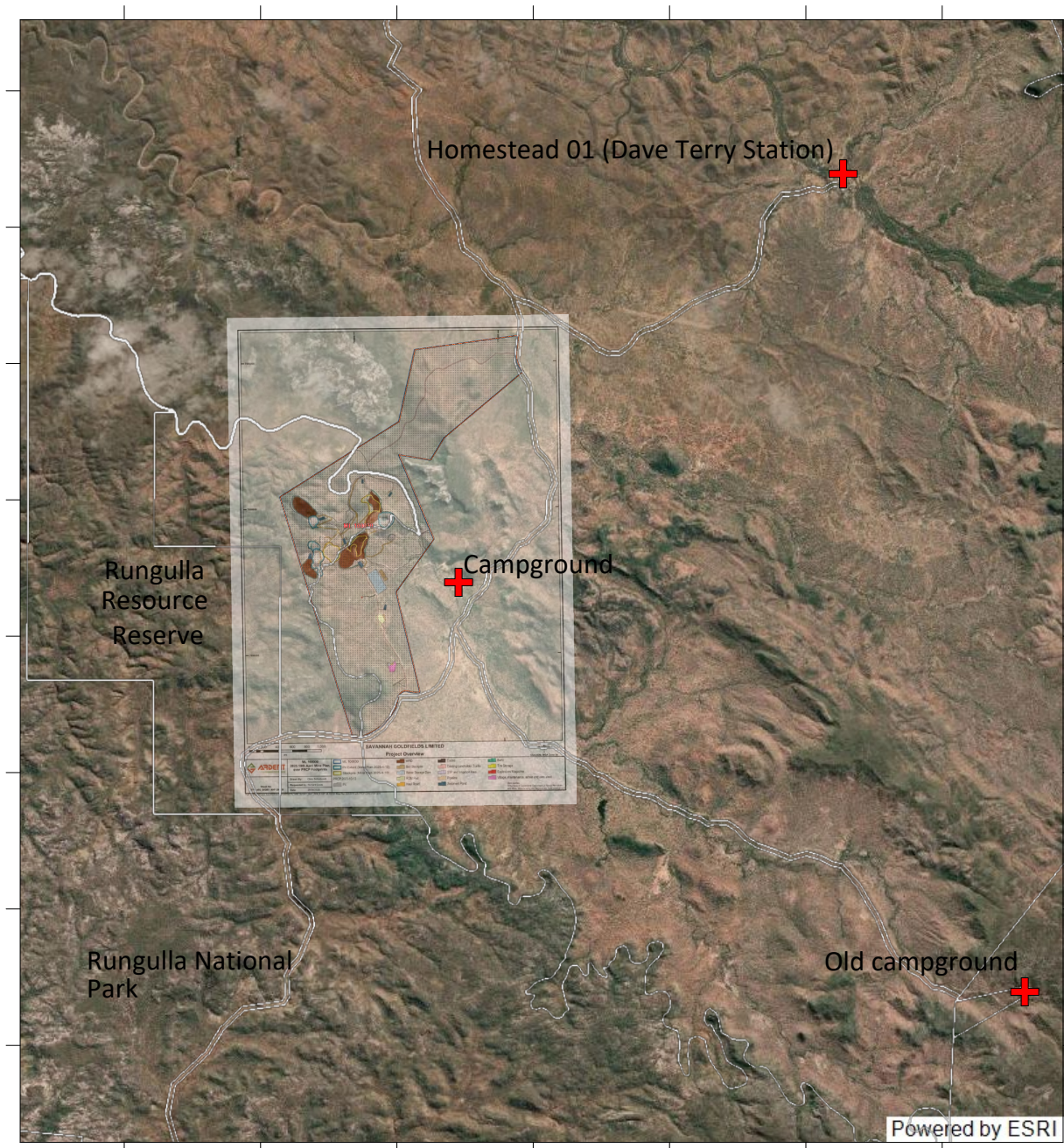


FIGURE 3: AERIAL SHOWING PITS AND CLOSEST SENSITIVE RECEPTORS

Noise Impacts

The following comment are made regarding noise emissions from the four identified phases compared with the assessed noise levels in the 2023 SEG report.

Phase 1 Mine Pit 1

This process is similar to that assessed in the 2023 model and report. Pit 1 is more distant from Homestead 01 and Campground than the previously assessed Pit 6. Thus, lower noise levels are likely at the sensitive receptors. The Rungulla Resource Reserve is likely to experience a 6dB(A) to 8 dB(A) increase in noise levels at the boundary. The Rungulla National Park is likely to experience a 1dB(A) increase in noise levels at the boundary. These change in noise levels do not vary the conclusions of the 2023 noise report.

Phase 2 Mine Pit 1 Extension, Pit 2 and Pit 4

This process is similar to that assessed in the 2023 model and report. Pit 1 Extension, Pit 2 and Pit 4 are more distant from Homestead 01 and Campground than the assessed Pit 6. Thus, lower noise levels are likely at these receptors. The Rungulla Resource Reserve is likely to experience a 6dB(A) to 8 dB(A) increase in noise levels at the boundary. The Rungulla National Park is likely to experience a 1dB(A) increase in noise levels at the boundary. These change in noise levels do not vary the conclusions of the 2023 noise report.

Phase 3 Backfill Pits 1, 2 and 4

This process is likely to be less intensive than that assessed in the 2023 report. Pit 1, Pit 2 and Pit 4 are more distant from Homestead 01 and Campground than the assessed Pit 6. Thus, lower noise levels are likely at these receptors. Since mining is not taking place, it is possible noise levels would be lower overall at Rungulla Resource Reserve and Rungulla National Park. These changes in noise levels do not vary the conclusions of the 2023 noise report.

Phase 4 Mine Pit 6 Expansion

This process is similar to that assessed in the 2023 model and in almost the same location. Thus, the noise levels would be similar to those identified in the earlier report and the conclusions made in 2023 hold true for the Pit 6 expansion and subsequent backfilling.

Conclusion

The proposed ongoing operations at Agate Creek have been reviewed and compared with the SEG noise assessment report from 2023. The original noise report provided a conservatively high environmental noise impact at all noise sensitive receptors. This review of future/proposed operations has determined the likely future environmental noise levels would be similar to or below that contained in the 2023 report. It is noted that due to the proximity of Pits 1, 2 and 4 to the Rungulla Resource reserve there will be an increase in noise levels of about 5 dB(A) at the boundary reducing to 1 dB(A) at the boundary of the Rungulla National Park. Thus, the proposed ongoing works at Agate Creek is unlikely to vary the assessment and conclusion expressed in the 2023 noise report.

Should you have any questions on this matter please contact me by phone on (07) 31172468 at any time or by email on mark@seggroup.com.au.

Yours faithfully

Simpson Engineering Group



Mark Simpson
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